

ABSTRACT OF THE DISCLOSURE

A method is disclosed for addressing the problem of uplink capture, which arises in a multiple-cell wireless LAN using directional antennas. The use of directional antennas may adversely impact the performance of channel access protocols. CSMA-type MAC protocols provide
5 dynamic bandwidth allocation in a distributed manner, eliminating idle time intervals. With such protocols, time-overlapped uplink transmissions by stations illuminated by different beams cooperate to capture the channel for long time periods. Without special measures, an imbalance could arise in the opportunity for the AP to access the channel, which could result in downlink delay and jitter and overall capacity loss. According to this invention, the uplink capture
10 problem is mitigated by requiring all (non-AP) stations to release the channel at pre-specified times.